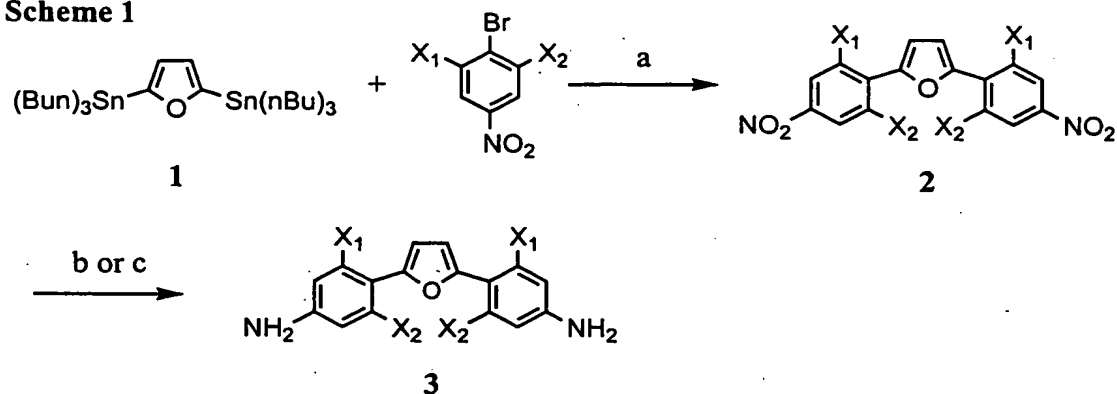
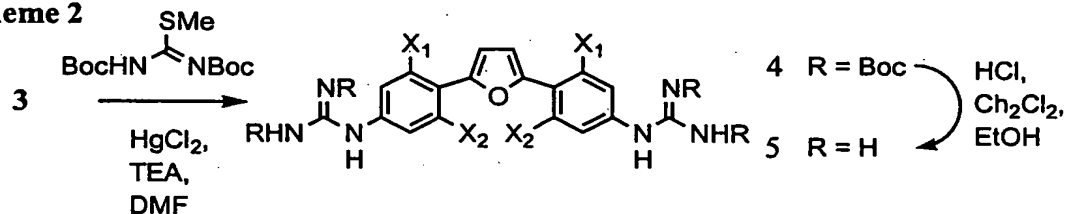


**Scheme 1**

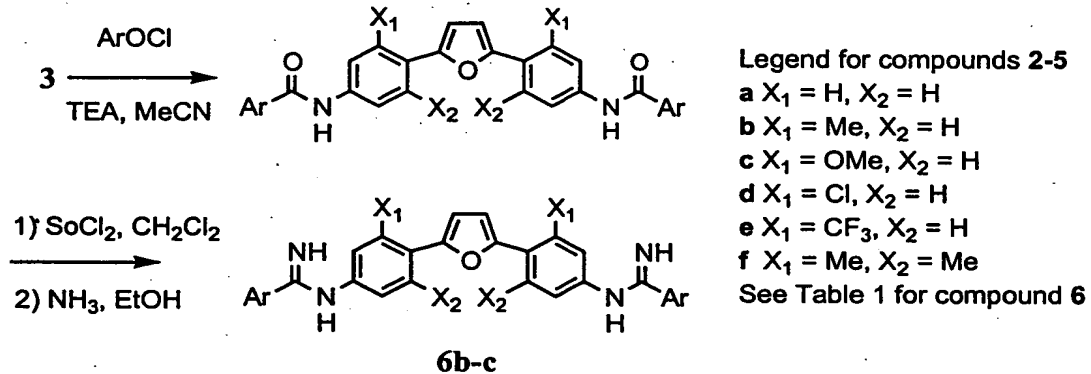


a)  $\text{Pd}(\text{PPh}_3)_4$ , 1,4-dioxane,  $\Delta$ . b)  $\text{H}_2$ ,  $\text{Pd/C}$ ,  $\text{EtOAc}$ ,  $\text{EtOH}$ .  
 c)  $\text{SnCl}_2$  dihydrate,  $\text{EtOH}$ ,  $\text{DMSO}$ ,  $\Delta$ .

**Scheme 2**



**Scheme 3**



**Scheme 4**

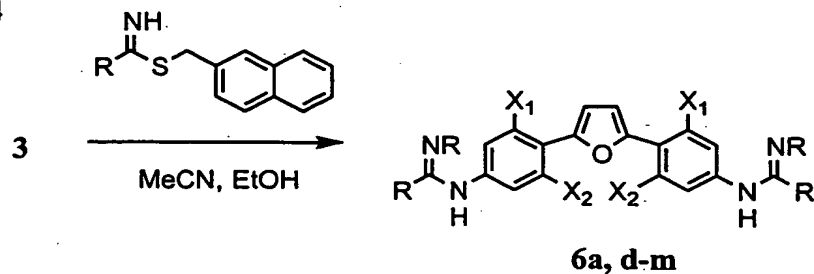


FIG. 1